













LERNER PUBLICATIONS COMPANY

PARENTA, A. MINARA MARIA CONTRACTOR

April 26, 1994

Leland Anderson 2525 South Meade Street Denver, Colorado 80219

Dear Mr. Anderson:

I was finally able to "borrow" the 8 photographs you requested from our production department long enough to have negatives made - they are enclosed. (As you know, the Nikola Tesla Museum holds the copyright to these images.)

Thanks again for identifying the portraits of Tesla's sisters - it was a big help.

Be sure to say hello if you are in the Twin Cities!

Sincerely,

xym when

Lynn Olsen Senior Photo Researcher













































SMITHSONIAN INSTITUTION, Div. of Electricity & Modern Physics

RAPID NOTE

ELLIST SIVOWITCH

DATE 10-15-80

10 LELAND ANDERSON

2525 SOUTH MEADE ST. DENVER CO 80219

LEE - RECEIVED YOUR NOTE OF OCT. 6. ATTACHED

IS AN 8 X 10 PRINT OF A WARDENCLYFFE TOWER

VIEW ENLARGED FROM A 2X3" NEGATIVE IN THE

FILES - (A PRIVATE DONATION ABOUT 10 YRS. AGO)

AS YOU CAN SEE THE QUALITY IS MARGINAL.

WE ARE CHECKING ON THE OTHER PHOTOS

PER YOUR LETTER SIGNED CELLIT

LITHO US A



From "Steel Rule & The Survey."

Ron Ziel + Livinge F. to.

Duell, Sione: Preser, N.



Teals Tower photo by Joe Burt.

Davis anagague sechia cultic

This photo copied and reprocessed
by Marry Galdman with permission
of burt estate.

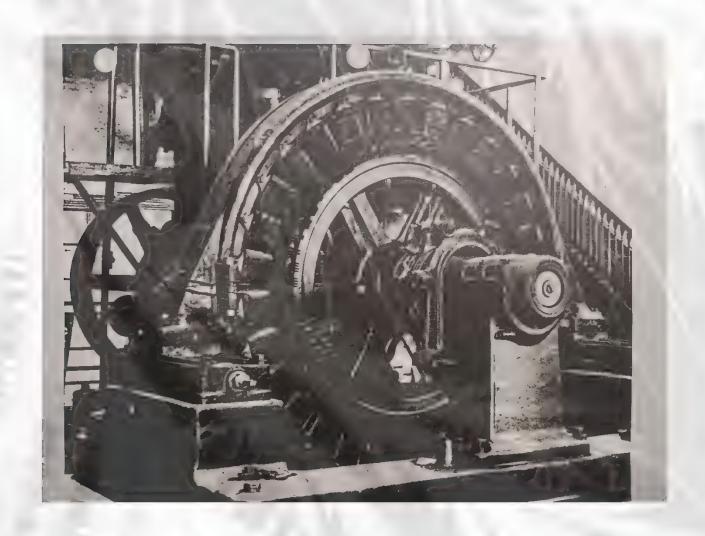
Courtesy of Harry Goldman
34 Any Line
34 Any Line
38 Any Line
38











2.2 PLANT 1 EQUIPMENT

2.2.1 Intake Equipment

The intakes for Plant 1 are located on the south bank of the river, 300 feet upstream from the Falls, and consist of two 20-foot-wide bays. The bays are protected by sets of trashracks, which prevent large pieces of debns from entering the intake area. Additional sets of trashracks, which collect smaller debns, protect the entrances to two 8.5-foot square headgates. The gates are operated by electric motors through gears and rack and pintons. The trashracks have mechanical raker assemblies, powered by electric motors, that remove the debns from the intake area. The operation of the rakers is automatic and instructed by signals from the pressure transducers monitoring the differential water pressure across the face of the trashracks. This prevents accidental dewatering of the penstocks due to blockage of the intakes. The rakers can also be operated manually at the trashracks or remotely from the control house.

2.2.2 Flowline and Penstocks

The headgates cover the entrances to two vertical 7.5-foot diameter steel penstocks, which descend 270 feet to the powerhouse directly below. The penstocks are secured to the walls of a vertical shaft hollowed out of solid rock, which opens into a man-made cavern, commonly called the "cavity." When the penstock for Units 1-4 reaches the cavity, it feeds into a horizontal receiver that extends for 160 feet along the length of the powerhouse. The cylindrical receiver has a 1-inch wall thickness and is 10 feet in diameter for the first 80 feet and then tapers down to 7.5 feet in diameter for the final 80 feet. The second penstock is dedicated to Unit 5 and feeds into its turbine directly.

2.2.3 Turbine and Generators

The cavity features four multiple runner, horizontal impulse-type waterwheel turbines (Units 1-4) and one horizontal Francis-type turbine (Unit 5). Units 1-4 each have a 2,500 hp, 6-runner turbine, which operates at 300 rpm and 252 feet of rated head. The runners are powered by a set of 12 needle-valve controlled nozzles. The existing units were installed shortly after the units initially installed were found to be inadequate. The Unit 5 turbine, a single discharge Francis, was added in 1905 and is rated at 10,000 hp, 300 rpm at an effective head of 260 feet.

The Unit 1-4 generators are horizontal shaft, stationary field generators, three-phase, 60 cycle, 2,000 volts at 300 rpm. The ratings for the generators are: Unit $1-1,500 \, \text{kVA}$, Unit $2-1,800 \, \text{kVA}$, Unit $3-1,500 \, \text{kVA}$ and Unit $4-1,500 \, \text{kVA}$, all with a 1.0 power factor (pf). Unit 5 is a conventional rotating field, horizontal-type generator, three-phase, 60 cycle, 2,000 volts at 300 rpm. Unit 5 is rated 6,220 kVA, with a 0.9 pf. The excitation for Units 1-4 is supplied by a common bus connected to a waterwheel-driven direct current generator rated 75 kW at 125 volts. A motor-driven exciter rated 75 kW, 125 volts at 690 rpm supplies excitation to Unit 5.

2.2.4 Tailrace

Tailwaters exit the powerhouse via a 450-foot long natural rock tailrace tunnel, which discharges directly into a natural plunge pool near the base of the Falls. An elevated walkway extends the length of the tailrace and is secured by a fence and locked gate at the plunge pool opening.

3. Underground Cavity

Character-Defining Features

- Structure hes 270 feet below ground hollowed out of the rock
- Unlined stone surface (no concrete or timber coffering)
- Wood structure column and beam supports
- Inverted trusses
- Concrete floors
- Original generating equipment (5 units) dating from 1898 to 1905
- Original light fixtures
- Original dedication light fixtures reading "1898"

Significance



Figure 3.3-3 - Original Lights in Underground Cavity

The Snoqualmie Falls Project was the first in the world to feature a completely underground electric generating station. Built in 1898, the underground cavity (Figures 3.3-3 through 3.3-5), which houses the electric generating station, represented a new mode of construction and operation for the late nineteenth and early twentieth centuries.

The location of the generating station reflects a unique adaptation by the project engineers to the natural landscape present at Snoqualmie Falls. By locating Plant 1 in the underground cavity, project engineers protected the generating equipment from external weather conditions and took advantage of the water's 270-foot drop through the penstocks to generate high head. The underground cavity and the generating equipment have retained much of their original appearance. These structures serve as reminders of an early era in engineering design.

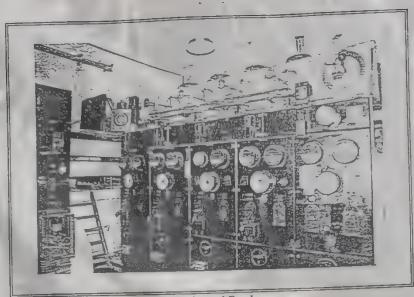


Figure 3.3-4 - Underground Cavity - Control Panel

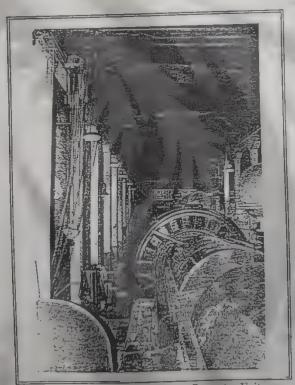


Figure 3.3-5 - Underground Cavity - Generator Unit



Expermental and tower-excitation side of Nikola Tesla's Wardencryffe plant building. L.I. (ca. 1914)

TESLA PLANT AT SHORCHAM (1913)

THOMAS R. BAYCES









Tesla's Laboratory 1914

Nikola Tesla's Wardenclyffe plant building, L.I., as seen looking down from half-way up tower. (ca. 1914)

3769

Photo by Thomas R. Bayles

Picture I took from top of Tesla's to er shoving Shoreham railroad station in 1914.

Looking down at railroad station across from Nikola Tesla's Wardenclyffe plant, L.I., as seen from half-way up tower. (ca. 1914)

3769

Photo by Thomas R. Bayles

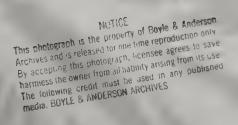


Looking down from tog Tesla's Taver at what is now Route 35 A . Tom Bayles 1913









Tesla's behmoth tower, to be used for the demonstration of wireless transmission of power across the Atlantic, was erected in 1901 at Wardenclyffe (near Shoreham) on Long Island. Built entirely of wood, except for the 55-ton skeletonized globe at the top, it was designed so that every spar could be taken out at any time and replaced if necessary.

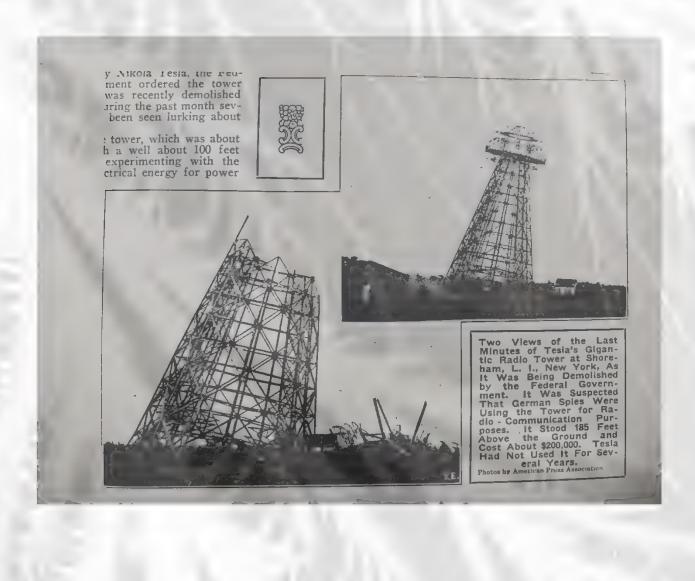
Photo by Lillian McChesney, ca. 1916











I met a man a number of years ago that was raised on Long Island in the neighborhood where Mr. Tesla, inventor of the Tesla Coil, had his lab. He told me of Mr. Tesla's notes blowing down the street when the junk men were distantling his equipment. It would be a wonderful thing is some of these notes were salvaged and could be found.

A. J. Baggs, Inventor 12503 Wash: Place MarVista 66, Calif. July 8, 1970.















Bue of Tela Tower, Stareham, L. I. ca. 1920 FOUIN J. BINNEY, center. MORTIMER F. BROWN, left MARSHALL SMITH, Night Base of tower at Tesla's Wardenclyffe plant on Long Island after removal of tower. Note large conduit from the laboratory building to the 120-foot shaft beneath the tower to carry electric and hydraulic mains. Ca. 1920. Base of Tida Taver, Shoreham, L.I. Khote by EDWIN J. BINNEY Ca. 1920



GERNSBACK PUBLICATIONS, INC.

200 PARK AVE. SOUTH NEW YORK, N.Y. 10003 (212) 777-6400

March 12, 1980

Ms. Margaret Chency 3854 San Juan Canyon Rd. San Juan Bautista, CA. 95045

As far as I know, the Tesla illustrations which appeared in The Electrical Experimenter and in Science & Invention magazines are in the public domain. My father, Hugo Gernsback, lost control of the companies which published these magazines more than 50 years ago. And, as far as I know, no successor companies are still in business.

The artist, Frank Paul, has been dead for some 15 years. So I think you are quite safe in publishing the pictures.

Paul worked for my father as an illustrator for more than 50 years beginning around 1915. Two of the illustrations which you sent were done by Paul - an assignment from my father to accompany the Tesla articles in 1919 and 1922. The illustration from the June 1919 Electrical Experimenter was, as the caption states, a photograph of a model. The model presumably was commissioned by Tesla at the turn of the century. I suspect that Paul retouched the photo and added some details. It has the characteristic Paul touch. Incidentally, Paul and my father worked as a team; Hugo would supply the ideas, Paul would draw them. As their collaboration matured through the years, Paul became quite capable of adding his own ideas and frequently did so.

I'm enclosing Xerox copies of the illustrations from our bound volumes.

Cordially,

Harry Gernsback

President

MHG/jc



The Take cure aft requering
no propeller or wingo:
Electrical Experimenter, Oct. 1919, p. 507

Nikola Tesla's conceptual aircraft design requiring no propeller or wings. Drawing by artist Frank Paul. (Illustration appearing in the Electrical Experimenter, Oct. 1919, p. 507)



THIS PHOTOGRAPH OF A MODEL SHOWS HOW THE TESLA TOWER BUILT ON LONG ISLAND, EIGHTPEN YEARS AGO, WOULD HAVE 'ODED COMPLETED FROM ITS APPEARANCE NOBODY WOULD INFER THAT IT WAS TO BE USED FOR THE GREAT PURPOSES WHICH ARE SET FORTH IN HIS ACCOMPANYING ARTICLE.



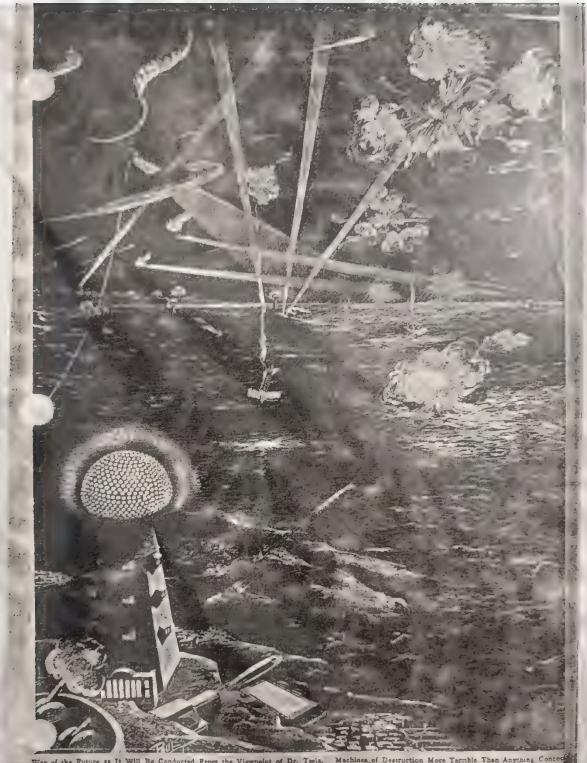
Caption for drawing by artist Frank Paul appearing in Science & Invention, Feb. 1922, p. 912: War of the future as it will be conduced from the viewpoint of Dr. Tesla. - Machines of destruction more terrible than anything concocted by the master minds behind the "World War." Armies and navies will sail under the ocean and through the skies with not a man on board. According to Dr. Tesla, these death-dealing monsters of the sea and air will be controlled and directed from distant points hundreds or even thousands of miles away by radio weaves of the proper sequence and frequency. The tower-like structures seen on the land in the accompanying picture are transmitting radio-electric power for operating and controlling the sea and air defense craft. When one of these aerial machines passes over an enemy city, the power radio control wave is flashed out and the giant craft drops gas and explosive bombs, destroying buildings and people as well. Man will be the master mind behind the future war, but machines only will meet in mortal combat. It will be a veritable war of "Science."

Artist's conception of war of the future as it will be conducted from the viewpoint of Nikola Tesla. The tower-like structures seen on the shore are transmitting radio-electric power for operating and controlling the sea and air defense craft.

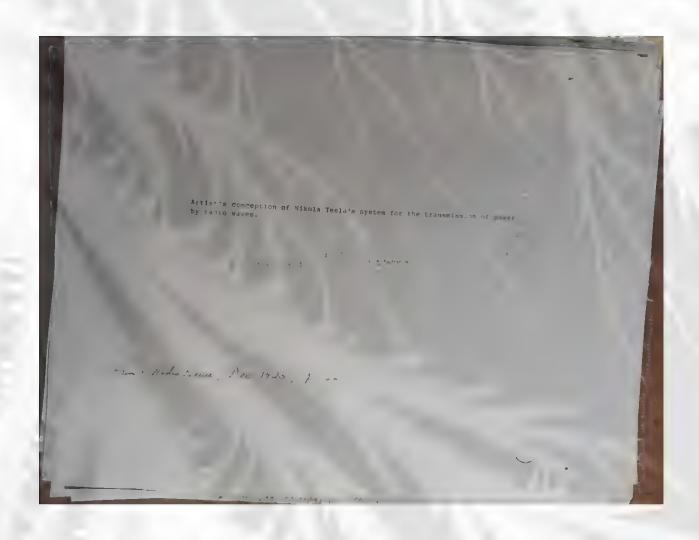
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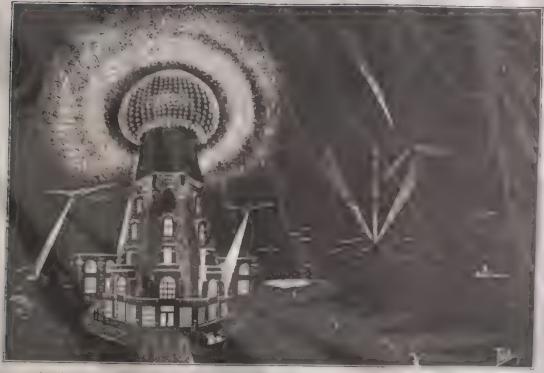
From: Lcience & Swentin, Feb. 1922, p. 9/2





War of the Puture as It Will Be Conducted From the Viewpoint of Dr. Tesia. Machinea of Destruction More Terrible Than Anything Concor By the Master Minds Bahind the "World War" Armies and Navies, Will Sail Under the Ocean and Thru the Street-With Not a Man Board. According to Dr. Tesia These Death-Dealing Monsters of the Sas and Air Will Be Controlled and Directed From Distant Points of Bress Thousands of Mules Away By Radio Waves of the Proper Sequence and Frequency. The Tower-like Structures Seen On the Accompanying Picture are Transmitting Radio-Electric Power for Operating and Controlling the See and Air Defense Craft. When Craft Machines Passes Over an Enemy City, the Proper Radio Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Giant Craft Drops Gas and Extended The Control Wave Is Fissish Out and the Control Wave Is Fissish Out and the Cont





An artist's conception of Nikola Tesla's system for the transmission of power by radio waves, which

Transmitting Power by Radio By JOSEPH RILEY



An excellent exposition of one of the problems on which investigators have been working over since the propagation of radio waves has been known.

THAS been the fondest dream of inventors for ages past to be able to transmit power in considerable amounts over distances both long and short. They have succeeded admirably, for today there are millioms and millioms of horse-power being transmitted from the various gower plants throughout the world to other parts et the world from the various gower plants throughout the world to other parts et the world from the world to other parts et the world to the form the same and the world to the form the same and the world to the form the same at the copper of the conducting with the same that the same transmitted with the same transmitted with the same transmitted of the prederessor, but he must go im one better the document him admirable processor when the same transmitted by making statements that it is impossible to do one thing or another Time and again the skeptirs have been shown the folly of their ways. No sooner does one of these "mitelligensa" set himself forth as an unbeliever, just as soon does someone ten down his wall of arguments, and accomplish the very thing the skeptic said was impossible. For this reason, the writer will not say that it will be impossible to transmit appreciable amounts of power over distances by

fone of the problems on which investigates the propagation of radio waves has been his means of radio. The writer will say, however, that it is impossible to transmit appreciable amounts of power over distances by means of radio. This paragraph is not an example of tautology, dear reader, for you must note the emphasis placed on the tenses. The point is, in just a few words, that in the light of the present knowledge, and the existing state of the art, it is not being done today. Let us hope that we will see it done ere our days are o'er.

There is another idea that may be appropriately interpolated here, and that is that, although, as far as I know the patent laws, there is none that prohibits the patenting of ideas dealing with perpetual motion eaching it will be a seen as the control of the control of

We can docu simply from our eage to get DM. Just the ham, who lives a pounding m, just as brass-pounding m, just as brass-pound from "Station KBVD.

If the reader has good eversgib he see this very plainly in the diagram she below. The curve in drawn for a station which sends a certain number of amperes up into its antenna. Right at the station if we had a receiving set there, we would receive a pretty strong signal. Let us cal that signal strength the period of the set of the



Shoreham Revisited

Dear Sir,

In regard to your ad in the January 1990 QST. I am sending you the enclosed photo.

About 1930 I worked at the RCA transmitting station at Rocky Point Long Island N.Y. The building in the picture was refered to as the Tesla Building and was used by RCA as a warehouse. The building was in Shoreham, just east of Rocky Point. I had no information except that Tesla used the building as a Laboratory.

There were rumors that he was trying to develop means of transmitting power by radio frequency.

RCA might have acquired the building via their connection with Westinghouse.

As to Tesla, there are many who believed that Tesla invented the three-phase induction motor and should have received the credit and monetary rewards.

I hope the picture has some value to your organization

73s Louis Wolf; KD2HV



Int'l Tesla Society

62

Oct/Nov/Dec 1989

Fran Stove Eiswick, but I Teste Leciety

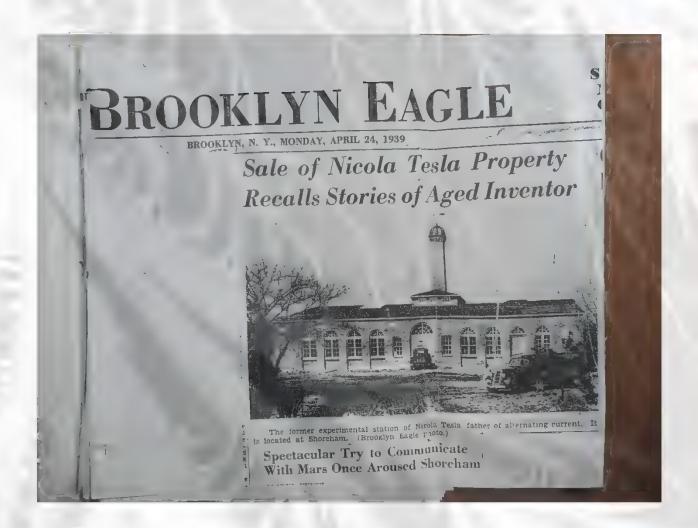
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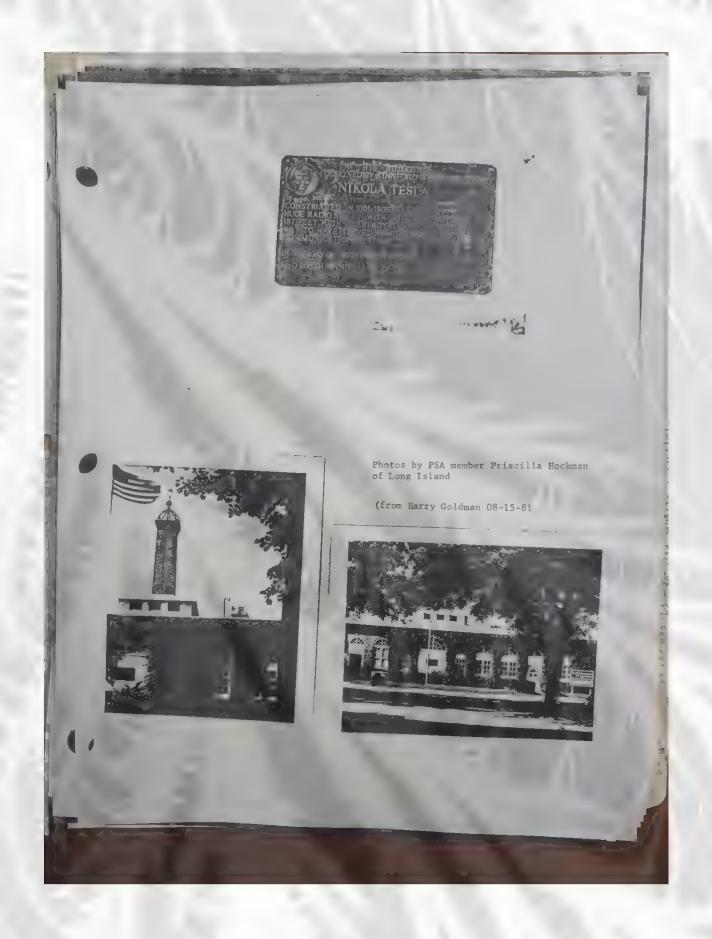












ELLEN SHERMAN 970 Tracy Place, Hackensack NJ 07601

19 January 1996

Dear Lee,

I know that you have many photos of the old Wardenclyffe property, but have not been to visit the land as it looks today. I have finally gotten that role of film developed that I took through and under the fence, and I am pleased to send you the following photos.

These are in the order I mailed them in:

1. The building from the right hand side of the property. You can see just left of the building a white building that seems to possibly be attached along the left hand wall of the lab. It protrudes out in front of the building and goes up an additional story. This part of this building has been suggested for removal by everyone involved.

- 2. The building from the right hand side of the property along the fence.
- 3. The building from the street in front of the lab with a telephoto lens. The orange fencing is around the tower foundation.
- 4. The building from the right hand fence line. Showing the back of the building and the chimney. The white roof line near the chimney shows the height of the building proposed for removal.
- 5. The street sign at the corner of the Tesla Street which runs along the right hand side.
- 6. The white house or cottage which stands at the fence line along the front of the property on 25A.
- 7. The rail road bridge that was in photos found by Chris Bach from the original period.
- I hope that you like them. Due to the inaccessibility, naturally the quality of the photos are poor, but I hope that you like them anyway. I am sending a similar set to Gary.
- I remain very interested in the outcome of this project. Dr Conover tells me that the local paper has been in contact with AGFA and that they say that we are "A viable option". Dr Conover is in touch with LILCO and trying to get them to name one of their people to the board.

Hope you are well and I will speak to you on the internet!

Ellen Sherman











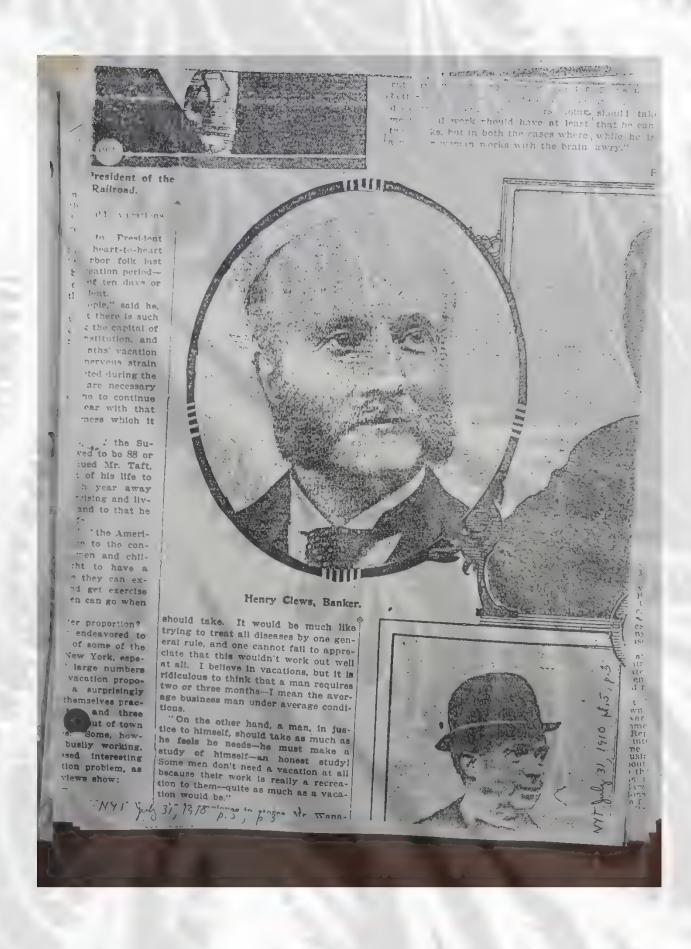


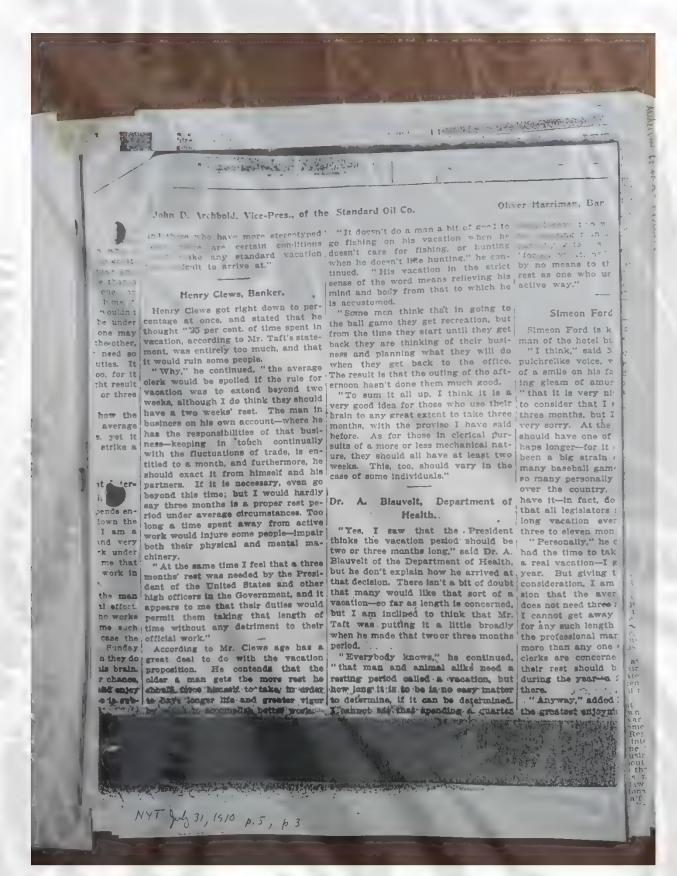
Tesla na večeri priređenoj u čast Henrija Kluza 1910. godine.

Dinner to Mr. Henry Clews
In honor of his election
as
President of the American Civic Alliance
by the
Board of Governors
1910
(FEB. 21)

New York Time 1910 Jan. (26) Fil. (3) June (5) July (17, 22, 26)

Linca Claus and the Alliance and
herment ment ind i the Time of
therine question "1910" Fries i the
subsan translation I Change to the graphy.





Section to the Son

LAFAYETTE-SAVAY OUSTED.

Civia Alliance Abolishes the Offices He Held, in Favor of Committee.

Le Chevalter Norbert Lafayette-Savay resterday the big stsick of the Board

which abolished the three Chairmanips he held in the organization he founded. In shearing him of power the board vested it in the hands of a committee of five. At last Thursday's session in the Hotel Manhatan Le Chevaller sought to stem the tide against him by suggesting that the authority he put in the hands of five men. At yesterday's meeting Le Chevaller, Max F. Friederang, and Frank M. Asiley put-up-a futile opposition. Friederang and Ashley refused to vote and tried to prevent a quorum by fleeling tha room. Le Chevaller's partisans explained that the campaign against their champion was a Tammany Hail plot, and that traitors in the Alliance camp sought to capture its invaluable influence.

Le Cheviller's fett the scene saying he will make a fight at the convention of the National Alliance in Rochester in September. Henry Clews resigned as President of the Alliance, but the board refused to accept the resignation.

The committee which will administer Le Chevaller's functions as Chairman of the Board of Givernors. Hoard of Trustees, and Executive Committee consists of Irving M Shaw, Dr. A. F. Haddad, Dr. Luclen Knapp, Ji. W. Milier, and Samuel Miller, and Samuel

HUSBAND OF HER YOUTH GONE

Mrs. Frank Davis, Married 22 Years, Asks Pottes tarFind Him.

Mrs Frank Davis, who for fifteen years has lived with her husband and their, seven children at 704 East 134th Street, Avenue Station to send out a general clerk at the Hotel Seville, who has been missing since May 25.

At that time he left home, telling his wife that his manager had assigned him to special work, and then to special work, and that he might have leach dated in the ody and inclosing \$25 over the ody. From May 25 to June 11 she received five lotters from him, and each dated in the ody and inclosing \$25 over the ody and could not come a first leaves place and East Seventh Rospital. Rospital was sufficiently and the was still same to be deposited with the company of the control of the ody and could not come home. Street, Flatbush: taken to the Kinga Country phia, or the Company of the control of the co

Lett to His Death.

NFW LONDON come ory Wheek in the first of th

Bronx:

CANNON, WILLIAM, 33 years oid, of 235 East 173th Street; removed from 166th Street and Road to Lebanon Hospital COHEN, 1DA, 18 years oid, of 310 East Seventy-second Street; overcome while at work on the ninth floor of 47 East Nineteenth Street, sent home.

CORNELL, JOHN, 64 years, address not known; overcome at 197 Bowery, where he fell to the sidewalk, receiving lacerations of the scalp; removed to Gouverneur Hospital.

FIRALLO, RAGON, 7 months old, of 512 East Fourteenth Street; taken to Bellevue known. There a LUPIRALLO.

Horpital.

McCl'E. THOMAS, 39, of 392 East Twenty-third Street; overcome in front of 280 Third Avenue; removed to Believue.

LYMAN, WILLIAM J., 25, at 330 East Twenty-ninth Street; taken to Believue Hospital.

McLAl'GHLIN, MICHAEL, 28, at Forty-second Street and Third Avenue; taken to Believue Hospital.

MURPHY, WILLIAM 44 at Manhattan and Mrs. John M Saturday evening ing she was coing she did not return who might be did not return whe did not return was made for h

Hospital,

McLAl'GHLIN, MICHAEL, 28, at Porty-second Street and Third Avenue; taken to

MURPHT, WILLIAM, 44, at Manhattann end
of Brooklyn Bridge; taken to Hudson Street
Hospital,

MURRAY EMMA, 18, at Amsterdam Avenue
and 1925; Street, taken to Washington

Heighte Hospital

NOVAK, John, 45, at Fifth Street and Second Avenue; treated by an ambulande surgeon and sent home.

PRITZ, S. 27, lawyer, of 432 Central Park West; overcome at 650 Broadway; attended and removed to home.

ROBERTSON, ANDREW, overcome at his residence, 135 Seventh Avenue; removed to New York Hospital; his condition critical.

SAMUELS GUSTAY, 39 at 678 Broadway.

SAMUELS, GUSTAV. 39, at 076 Broadway:

SILVERMAN, SAMUEL, 24 years old, 7 Agenue D: overcome while at work on the hinth floor of 40 West Twenty-second

STRETCH, EMMA, 22 at Forty-second Street and Sixth Avenue; taken to Flower Hos-pital.

Stored: taken to Believue Hospital
Street; taken to Believue Hospital
IANKOLLISKY, JULIA, 24 years old of 208
East Fourth Street; overcome at 100 University Place; sent home

to 6 mil

How she came to tions of violence.

the search but pearance of the y alarm was sent of Her friends scot mitted suicide. way and have fal

BONDHOLD

Aggressive Act bash-Pittsburg

Holders of the cent, 50-year bon burg Terminal ? been circularized c. mittee of which Brothers is Cha Join in the actio contemplates takt

SYONSOHN, MINNIE. 20, at the Second Street; taken to Relievue Hospital

IANKOLLSKY, JULIA, 24 years old of 238
East Fourth Street; overcome at 100 University Place; sent home

The Brooklyn List.

This is the list of prostrations for Brooklyn
Brooklyn List.

This is the list of prostrations for at the foot of Noble Street, and removed to the Eastern District Hospital.

HOADLEY LOUIS, 38; taken to the Coney Island Hospital.

KENT, EAMUEL, 23 years old, of 1,601 Bergen
Rireet, Hasbush; taken to the Kings County
Street, Flatbush; taken to the Coney
Street, F

Trustees Assail Lafayetto-Savay and Fists Are Brandished in His Face.

THREATS MADE TO OUST HIM

Treasurer Shaw Wrathfully Resents

Le Chevaller is the founder of the allianance. His knightly ire had been aroused by a proposal to organize district clubs of the proposal to organize district clubs of the alliance in the first act was to write the control of the club, and the club, and

v General Education F . At a real Mary Edit 1 Killing Assessment .

a see of reports that Le Chevaller was a better time to Ches alter tened of Washington At their time to Ches alter tened that it is dead made any protone of helps the great class of the Washington At the control of t

CLOAK FACTORIES BURN.

Blaze on the East Side Thought to be Incendiary-One Life Lost.

THREATS MADE TO OUST HIM

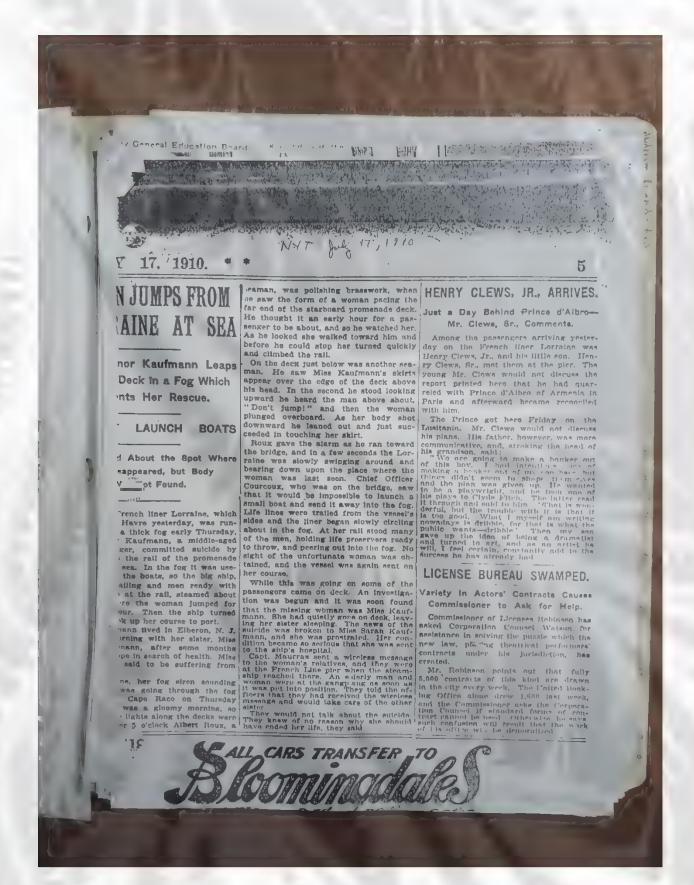
Treasurer Shaw Wrathfully Resents

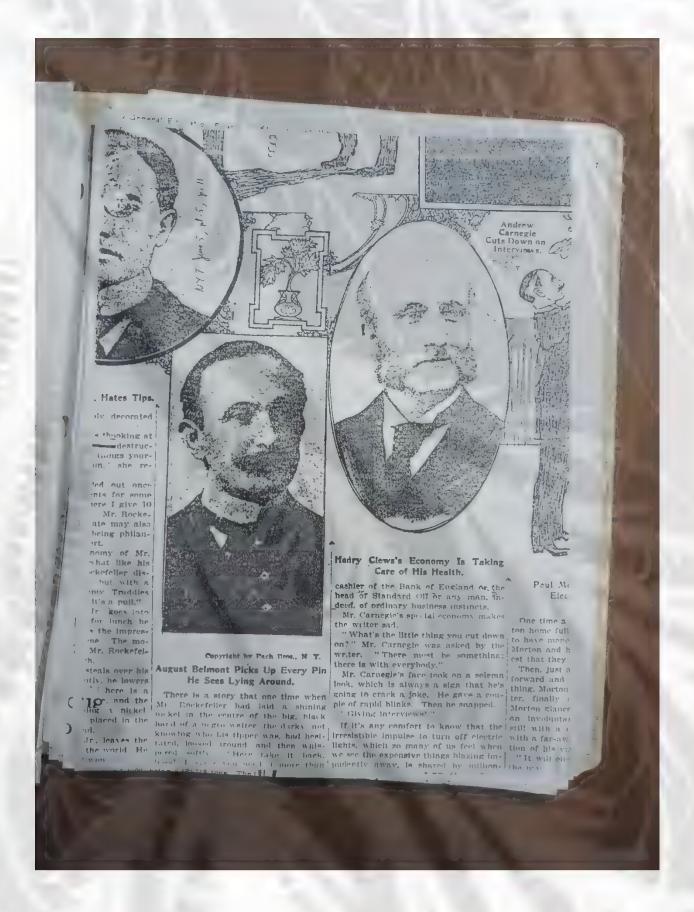
One of His Letters and Refuses

to Make Peace.

Le Chevaller Norbert Lafayette-Savay of the rebuff indignant yesterday at a special meeting of the Board of Trustees of the American Civic Alliance. He had cut short his vacation and "stopped not for brake nor stayed not for stone" to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to brake nor stayed not for stone" to brake nor stayed not for stone "to be started. The police ordered thile activations when the firements 203 and 2 3 Rivinston to the alliance stone the stone to the started. The police ordered the stantage of the stone the late to the Treasurer of the scholars and the stone the late of the late of the stone the stone the late of the stone the late of the stone the late of the stone the late of the late of the late of the stone One life was lost and \$30,000 damage to |

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Decries Calamity Howling and Tella a pair guaranteed. Story on Russell Sage.

Henry Clews addressed the members of the Finance Forum of the Young Men's Christian Association at the Fifty-seventh Street Branch last night on "Flity Years in Wall Street." After a defense of Wall street Branch last night on "Fifty Years in Wall Street." After a defense of the institutions must such the institutions of the institutions, it is the interest of the feducity of the institutions. It is amount available for appropriation of the financier that was old enough the feducity of th

The Ma stheleading has and Dress Shield. It contains no rubber, is Odorless, Impervious, Hy once. Durable, Washable. The only shield combining these essentials, rendering CLEW ; DEFENDS WALL STREET in the perfect Dress Sileld Livery

THE OMO MAPEG. CO., Addretown. Conn.



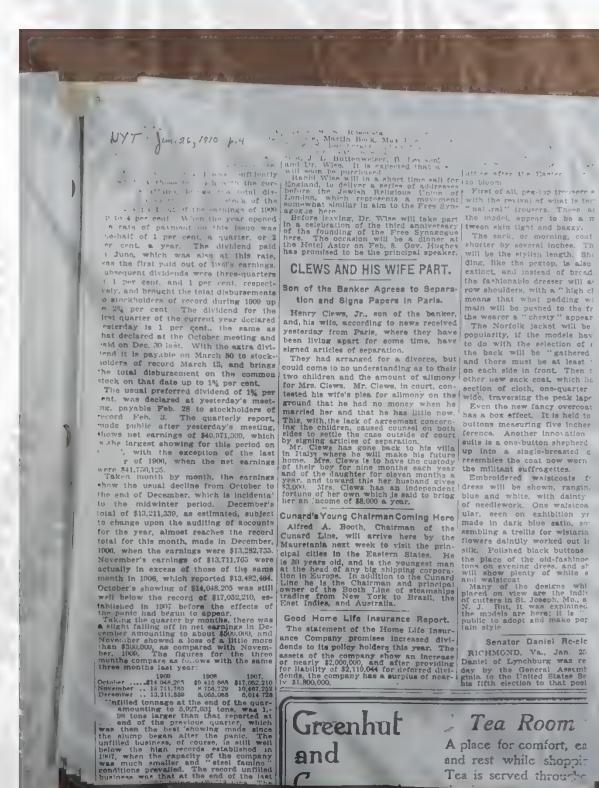
Employers in search o'high-class Help,

NYT Fdi. 3, 1910, p. 6 lave you an arctic r

most homes there is one room osen from among the rest for fair degree of warmth. Obeve how the children cling to it room with the stubbornness sture; how they fret at the ought of a cold bedroom, and ok with horror at the cold ap-



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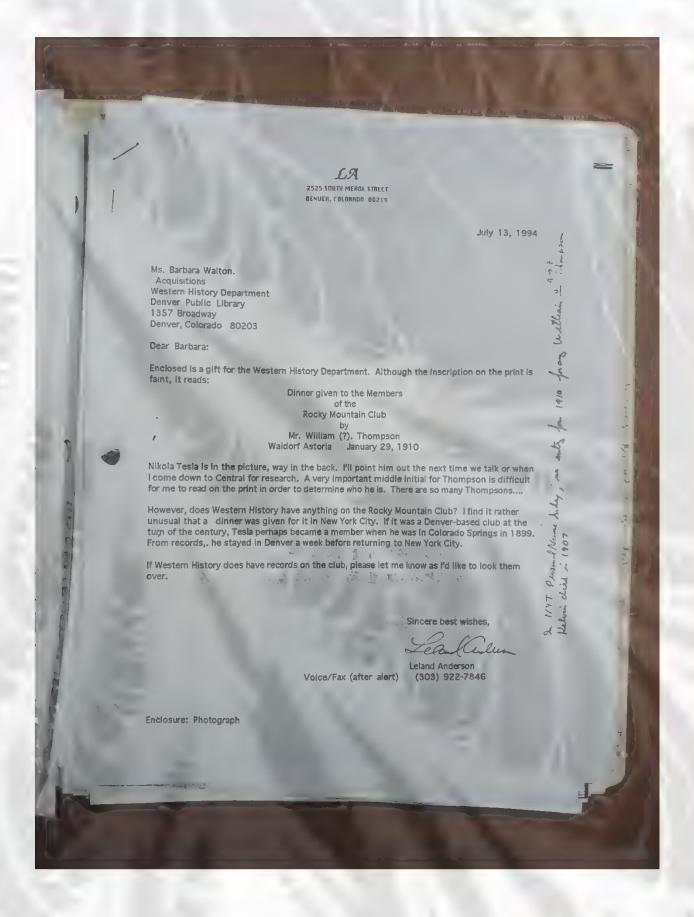
Greenhut and

Tea Room

A place for comfort, ea and rest while shopping Tea is served througher



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Second banquet meeting of the Institute of Radio Engineers (now part of the Institute of Electrical and Electronics Engineers) at Luchow's in New York City, April 24, 1915. Many prominent figures in the development of radio attended including:

Froto by C. A. Scherer Courtesy Smithsonian Institution, Museum of History and Technology

Second banquet meeting of the Institute of Radio Engineers (now part of the institute of Electrical and Electronics Engineers) at Luchow's in New York City. April 24: 1915 Many prominent figures in the development of radio attended. Nikola Tesla is standing at back. Photo by C.A. Scherer.





Mikota Tesla, in his offices at 8 West 40th Street, John floor, scross are street from the New York Public Library. ca. 1916.





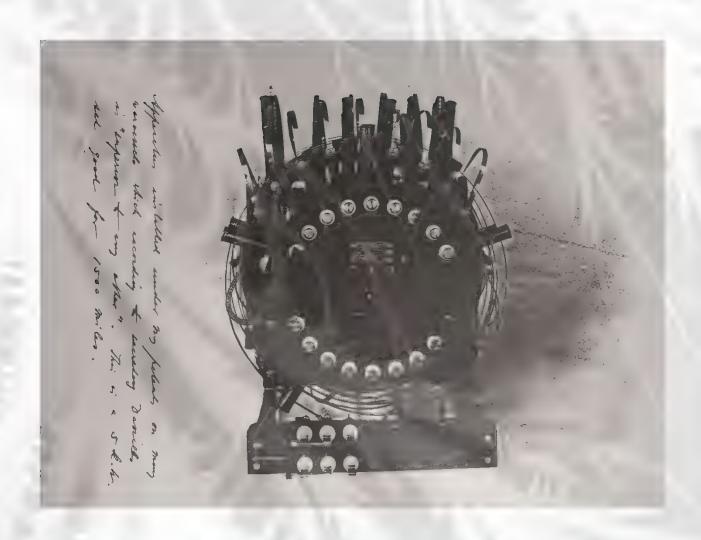
Tesla-Morgan Archive photograph #2 B&W from the cyanotype original

Credit Line: Courtesy of the Archives, The Plespoot Morgan Library, New York.

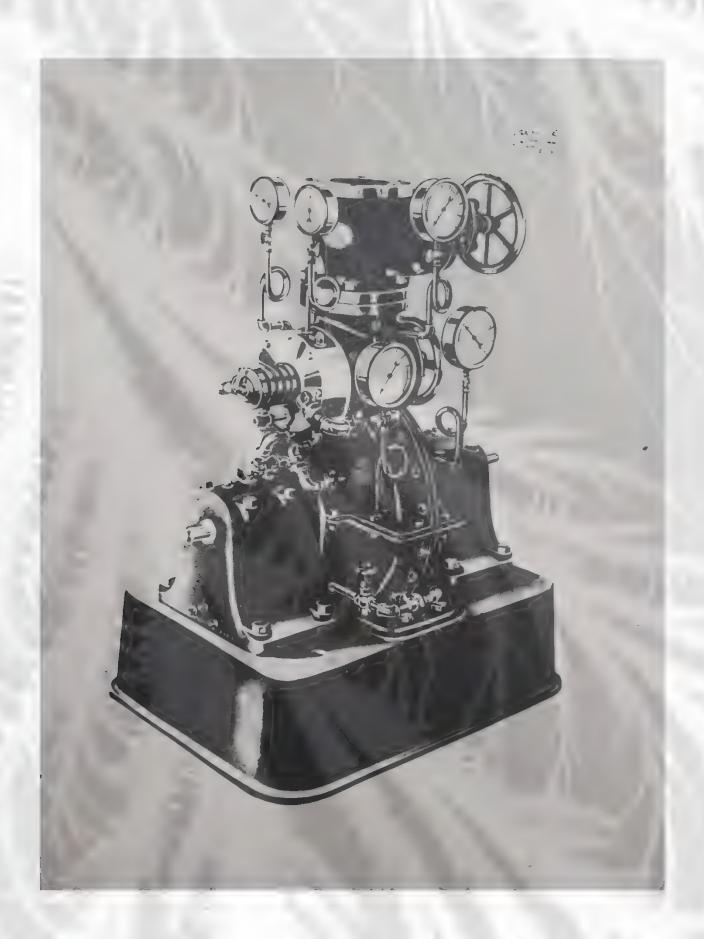


A pair of photographs showing a U.S. Navy shipboard transmitter manufactured by the Lowenstein Radio Company. This was a 5 kilowalt set capable of 1,500 mile transmission used during WVI. The handwritten caption by Tesla reads "Apparatus installed under my patients on many war vessels which according to Secretary Daniels is "superior to any other." Note the nameplates on rear of set, the lower one reading. in many other." Note LICENSED UNDER NIKOLA TESLA PATENTS 1900 Navember 5 1901 March 17, 1903 April 14, 1903

March 20 1900 May 15, 1900 October 22, 1901







A Tesla steam turbine of 200 horsepower (1911). It stood on a 20 x 35-inch base and measured 5 feet from floor to top of throttle valve. The Tesla steam turbine has no blades, vanes, or valves, is reversible, and operates by virtue of two fundamental properties of a fluid -- adhesion and viscosity. The steam travels a spiral path between a number of thin, closely-spaced smooth discs. With recent advances in materials technology, the turbine is now under development in a number of commercial and government research laboratories.

Caption provided by the Tesla Museum: "Complete steam turbine designed by Tesla, 200 horsepower."

Scientific American caption: A 200-horsepower high-pressure turbine. This view shows one complete high pressure unit, with the steam throttle above, and below it the reversing valve and the compact turbine. Note the many gages used in the tests.

Technical World Magazine caption: Testa's turbine of 200 horsepower equipped with gauges for testing. It stands on a base 20 by 35 inches and measures only five feet from floor to top of throttle valve.

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Caption provided by the Tesla Museum: "One of Tesla's first steam turbines, 110 horsepower, working circuit diameter 9 3/4 inches. Tested at the American and British Manufacturing Company, Bridgeport, Conn." [ca. 1910]

The World's Work caption: This absurdly small engine — Tesla's smallest model — develops 110 horsepower.

Technical World Magazine caption: Could be covered with a hat, yet is an engine of 110 horsepower.

Electrical Review and Western Electrician caption: The Tesla 110-horsepower turbine, conveying an idea of the size of this machine.

[The idea of a new and revolutionary way of transmitting energy to and from fluids in a practical way came to Tesla at the end of 1907 when he met the wealthy Joseph H. Hoadley. Hoadley was fascinated with Tesla's personality and with all the possibilities, agreeing to put at Tesla's disposal the mechanical workshops of the American and British Manufacturing Company owned by Hoadley in Bridgeport, Conn, and Providence, R.I. By 1908, these two signed an agreement according to which they were to form a TESLA PROPULSION COMPANY using Tesla's future patents. Tesla's assignment was to make a new drive for Hoadley's yacht, the "Alabama," using the principles of his invention. Although Tesla did not fulfill this assignment during 1908-1910, he acquired great experience experimenting with different types of water, steam, gas turbines, pumps, compressors, blowers, and ventilators.]

The Waterside Station of the New York Edison Company-II.

THE GENERATING SYSTEM.

In the first section of this description of the new Waterside plant of the New York Edison Company, a comprehensive statement was given as to the general conditions and the problems of current generation and distribution which the station is intended to disgue of musicatorily, and some details were also entered into with re-

tendency and the unceasing cry is for a larger station, a larger operat ing room, a large exchange, but at each remove the danger grows of more complete shut down in case of trouble and disaster. How t deal with this contingency and circumvent the peril is one of th superadded elements of the problem of giving service, and it



Fig. 15.—New Waterside Station, New York Finson Company, from First Avenue and Thirty EIGHTH STREET, SHOWING DANAMO ROOM. SIBE AND WEST FROME.

yard in the main engineering features. It will have been gathered that in such a plant and such a system mere figures in itself introforces new complexities and brings itno sight a new range of dif-

extent with which it necessitates heavier outlays on construction

Central station work of late years growing into mechanica to electrical work that deals with the distribution of curserior at chigence, etc., from a central source, the natural to incessant and wide fluctuation of demand has been peculiarly

"Circulation Books Open to AIL

WOL. XLIX. NO. 17,282.

Company, New York World.

AT EDISON PLANT

Explosion Which Startled the Weighborhood Kept a Mystery at Immense Waterside Rower Station.

WOULDN'T LET SURGEON TAKE INJURED TO BELLEVUE

Police Barred Out and Victims
Whicled Off in Auto-Gave Whirled Off in Auto—Gave Figtitious Addresses.

Fire men were burned, three of them the true nature of which was not disstoned, the police say—at the immense waterside power plant of the New York Ziteon Company, at Thirty-eighth street and the East River.

The same reticence and air of mysters that hung over the big norideal at

the same reticence and air of the Waterside plant some months ago the Waterside plant some months ago looked yesterday's explosion. The police were not admitted to the place at all, and even the Believue ambulance tirgeen who got in on the emergency local failed to find out what had caused

The victime, badly burned as they wire, gave to the surgeon addresses which atterward turned out to be facilities.

Secretly was the ambiande sone where a supposed the three burnes, cap, year of the plain entrance of the Waterside works and the three burnes, cap, year of the Sidettro lighting trust were wairled another the three burnes, cap, year of the New York Belle.

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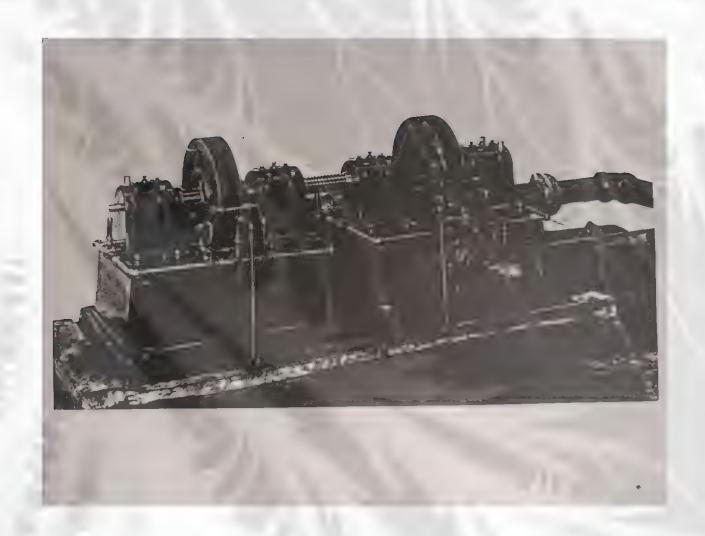


Miss Beatrice Mills is one of famous Mills twins. She is tall stately, an ordent admirer of goli tennis and an expert horsewoman, offered by Mrs Herman B. Dury

the Nawport competition.
She made her debut in society wit
twin sister, Gladys, new Mrs. 31
Carnegie Phipps, of Pittsburg, at balls given in their honor, which the events of the social asson. first was given by Mr. and Mrs. W law Reed, their uncle and sunt, and second by their parents. At one the was reported that Miss Beatrice

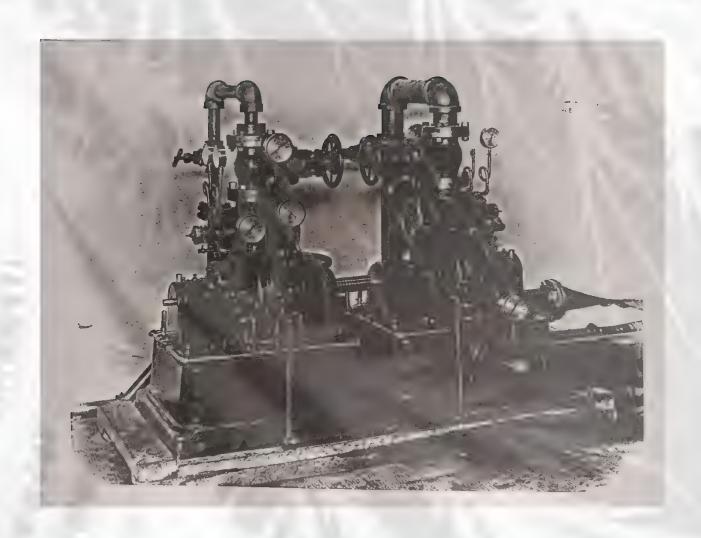






Caption provided by the Tesla Museum: "Experimental installation at [the Edistribution of Experimental installation at [the Edistribution of Experimental installation at [the Edistribution of Experimental Installation of Edistribution of Experimental Installation at [the Edistribution of Experimental Installation of Experimental Installation at [the Edistribution of Experimental Installation of Experimental Installation at [the Edistribution of Experimental Installation of Experimental Installation at [the Edistribution of Experimental Installation of Experimental Installation of Experimental Installation of Experimental Installation at [the Edistribution of Experimental Installation o

entific American caption. The Tesla turbine testing plant at the Edison Wasses de Station, New York. Top half of casings is removed, showing two rotors in the totor consists of 25 disks, [3 1/2 inches across the face] by 18-inch diameter. The steam enters at the periphery, and flow in spiral paths to exhaust at the enter of the disks. The driving turbine is to the left, the brake turbine to the right. Between them is a torsion spring. The steam inlets are on opposite sides in the two rotors; the driving rotor moving clockwise. The torsion of the spring is automatically shown by beams of light and mirrors and the horse power is real off a scale. At 9,000 revolutions per minute with 125 powers at the throttle and tree exhaust, this turbine develops 200 horsepower.



Caption provided by the Tesla Museum. "Complete installation from photograph No 5. Pressure gages at various points of both turbines" The World's Work caption. Testing the speed, power, and steam pressure of a Tesla turbine—the picture shows two engines, each capable of producing 330 horsepower, working against one another for test purposes, the torsion spring connecting the two being used to indicate the amount of power developed



Caption provided by the Tesla Museum. "Tesla's experimental turbine driven by gas and steam on the desk at the American and British Manufacturing Company in Bridgeport, Conn."







Capuon provided by the Tesla Museum: "Turbo-pump designed by Tesla for the American Pipe and Construction Company, capacity 3,500 gallons per minute. Manufactured by the American and British Manufacturing Company [and sold to the Corliss Steam Engine Works foundry in Providence, I. I.]"



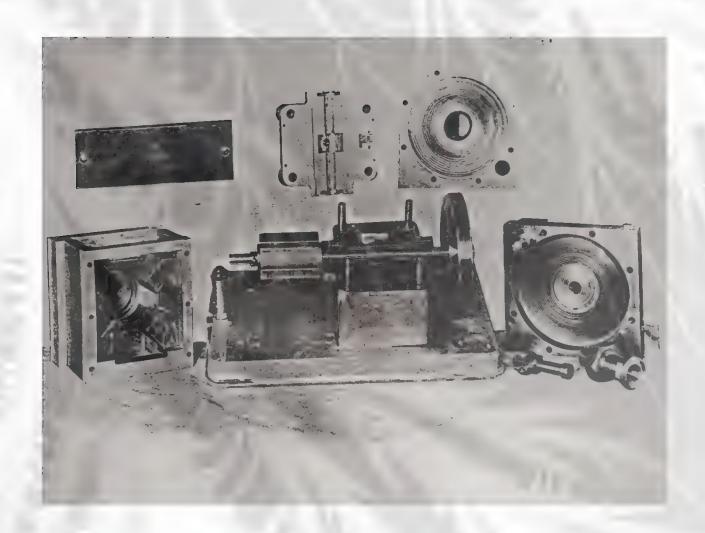




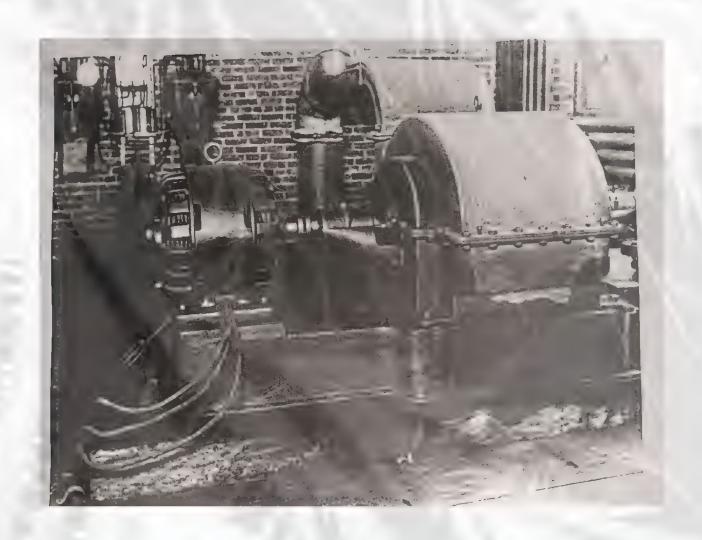
Caption provided by the Tesla Museum "Tesla's turbo-generator" C treated information: This is not a turbine generator combination. See, for example Vikula Tesla Lectures, Patents, Articles (1)56. Nikola Tesla Museum photographs section, where the combination is correctly identified as a turbo pump.



Caption provided by the Tesla Museum." Model of a pump used by Tesla to demonstrate his invention of a new nechanical principle for the transfer of energy between the working circuit and fluids. The pump, with a working circuit diameter of 3 inches, was driven by an electric motor of 1/2 horsepower and could lift 40 gallons of water [per minute] to a height of 9 feet." Scientific American caption. The turbine used a a pump. This little pump, driven by a motor of 1/12 horsepower, is here shown delivering 40 gallons of water per minute against a 9 foot head.







Caption provided by the Tesla Museum: "Blower designed by Tesla, in use since November 1909 in the American and British Manufacturing Company's foundry in Corliss."

Corrected information: The blower was manufactured by the American and British Manufacturing Company and sold to the Corliss Steam Engine Works foundry in Providence, R.I.

Additional information (from Westinghouse letter dated June 28: 1909 The blower is driven by a 75 HP #8-B "HF" frame motor, three phase, 220 volts, 60 cycle, 2-pole, with starter." Approx. 3.400 RPM



Caption provided by the Tesla Museum: "Tesla's turbo-generator from previous picture during testing, on desk." Some desk! This is not a turbine-generator combination and it undoubtedly weighs over a ton Again, from, Nikola Tesla: Lectures, Patents, Articles (1956, Nikola Tesla Museum), photographs section, the combination is correctly identified as a turbo property of the combination of

tified as a turbo-pump

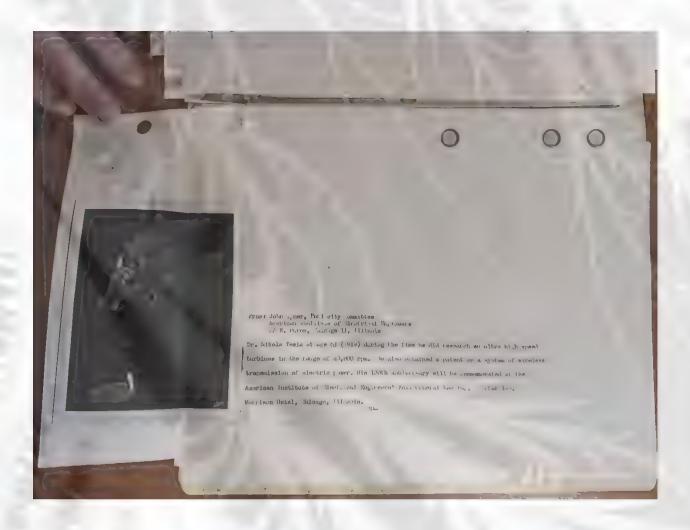


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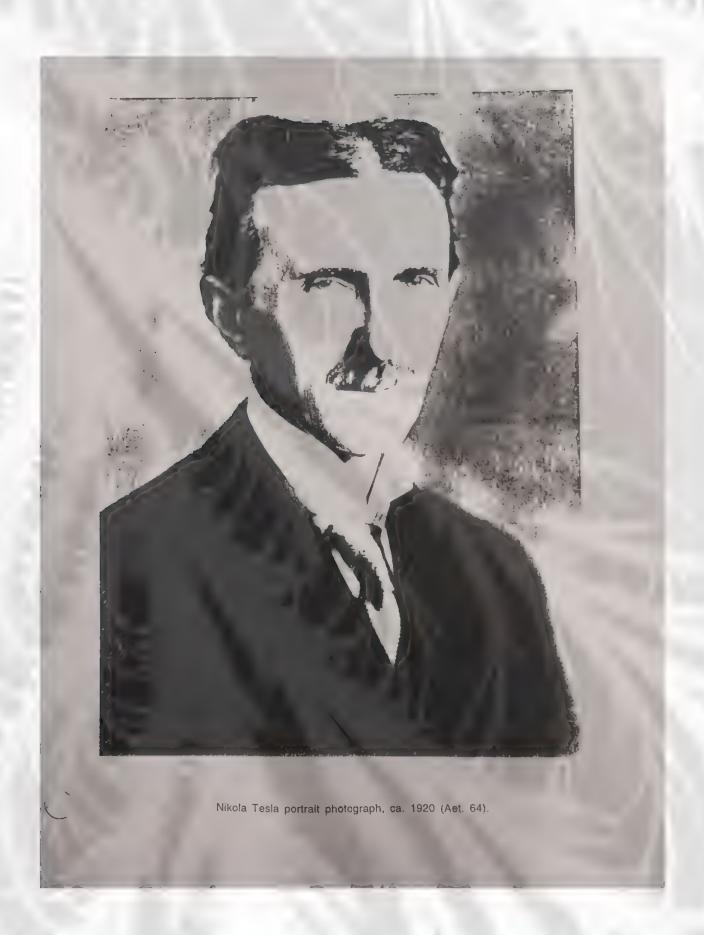
TESLA PORTRAIT by the Princess Lwoff-Parlaghy, exhibited for the first time March 1, 1916, at a reception given at the Princess' studio in New York City. The portrait measures 53 x 48 inches, intended to be shown under blue illumination. It was sold at auction after the artist's death April 9, 1924, listed at # 330 in the sales catalogue.

(No existing negative, only print, no copyright.)

Tesla portrait by the Princess Vilma Lwoff-Parlaghy, exhibited for the first time March 1, 1916, at a reception given at the Princess' studio in New York City. The portrait was intended to be shown under blue illumination, and appeared as the cover on TIME magazine for July 20, 1931.

Photo courtesy L. Anderson





TUCKERTON RADIO STATION

(ALSO ENGLIN AS THE MYSTIC ISLAND RADIO TOWER)

AND THE HICKORY ISLAND RADIO TOWER)

SCEAN COUNTY, NEW TERSEY

OCEAN COUNTY BUREAU OF PUBLIC RELATIONS

Jack Lamping, Director

COURT, HOUSE TOMS RIVER, N. L.

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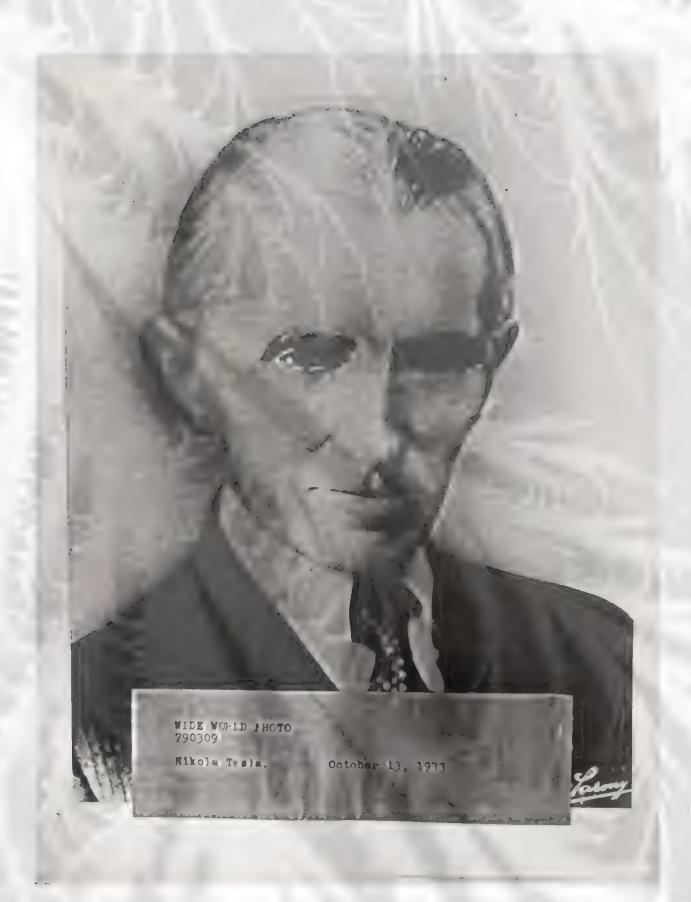


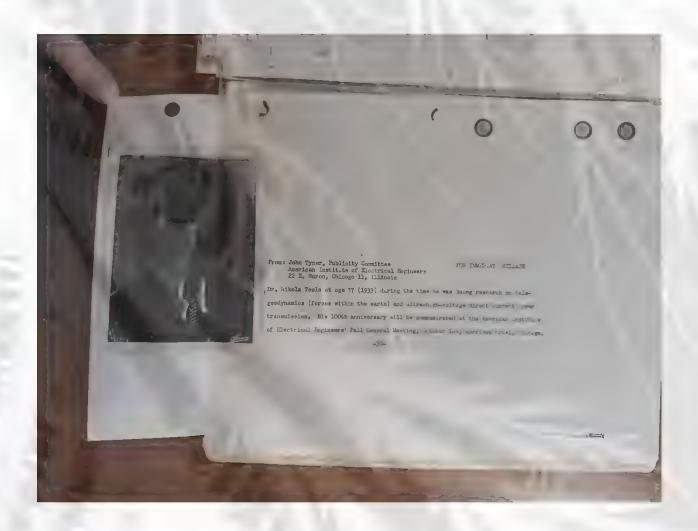


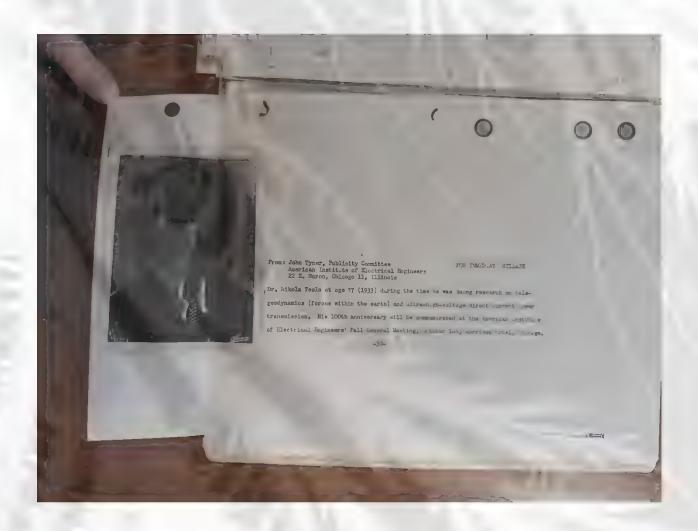














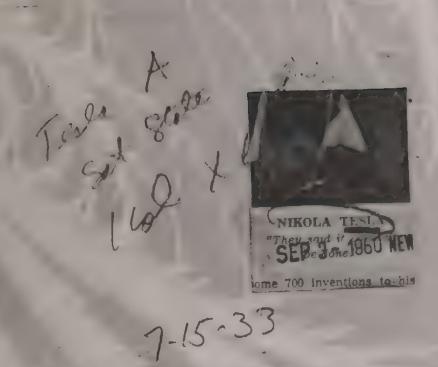












Like the great Edison for whom he once worked as an electrical designer, Nikola Tesla sleeps little (ordinarily from 5:30 a. m. until about 10:30), he told visitors to his seventy-sixth birthday party in New York. Born in Serbia July 10, 1857, and still active, the "father of radio" declarea that he was never in better health.

[Wide World.]

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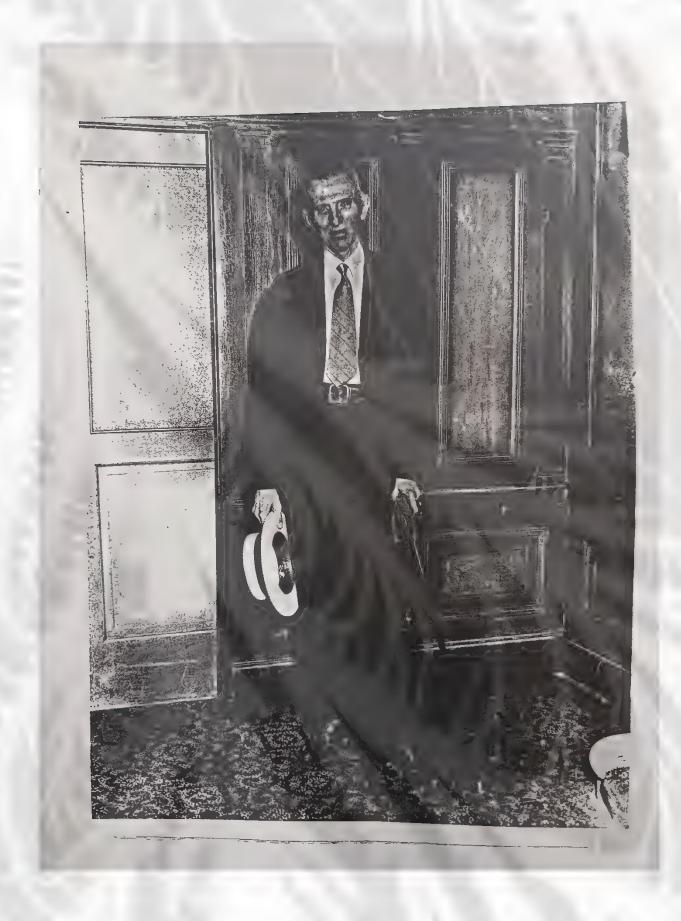
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7-15-33

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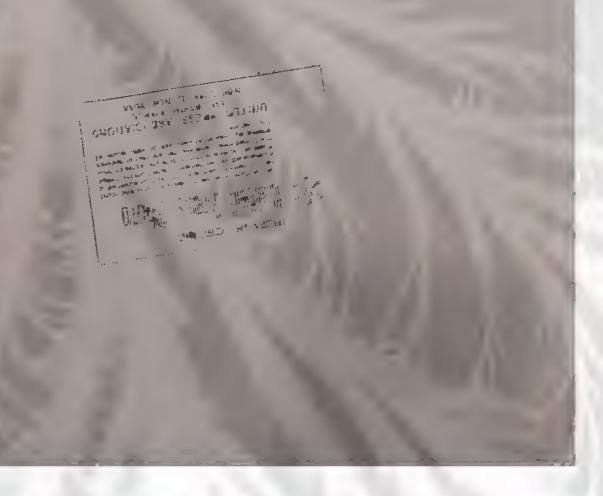


LONG-DISTANCE DEATH HIS SECRET

DR. NIKOLA TESLA, NOTED INVENTOR, (ABOVE) WHOSE ACHIEVEMENTS IN HIGH FREQUENCY TRANSMISSION, WIRELESS AND OTHER FIELDS HAVE WON HIM INTERNATIONAL FAME, ANNOUNCED HIS SEVENTY-EIGHTH BIRTHDAY, JULY 11TH, THAT HE HAD PERFECTED A DEATH-DEALING BEAM, CAPABLE OF DESTROYING A FLEET OF PLANES FROM A DISTANCE OF 200 MILES. HE HOPES TO BE ABLE TO PRESENT HIS LETHAL DISCOVERY BEFORE THE DISARMAMENT CONFRENCE AT

CREDIT LINE (ACME).

7/11/34



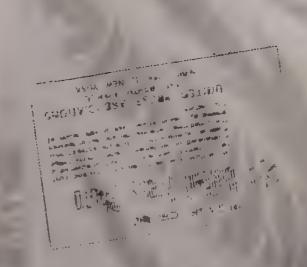


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-6/12/34

CREDIT LINE (ACME).







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NIKOLA TESLA, AT 78, BARES NEW 'DEATH BEAM," Hotel New Yorker, July 10, 1934. Electric ray can annihilate army at 200 miles. Invention to be presented to disarmament convention at Geneva. Can also be used in peacetime to transmit power over distances limited only by the curvature of the earth. Advises two of four necessary pieces of apparatus have been built. Has developed instrument which disproves current theory that sun will burn out to a cold cinder.

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NIKOLA TESLA, AT 78, BARES NEW 'DEATH BEAM," Hotel New Yorker, July 10, 1934. Electric ray can annihilate army at 200 miles. Invention to be presented to disarmament convention at Geneva. Can also be used in peacetime to transmit power over distances limited only by the curvature of the earth. Advises two of four necessary pieces of apparatus have been built. Has developed instrument which disproves current theory that sun will burn out to a cold cinder.

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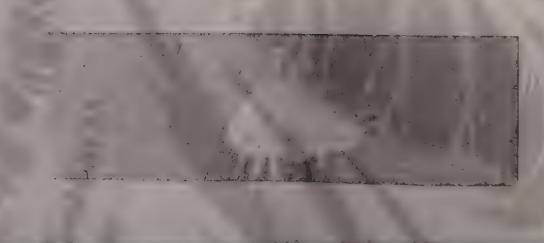
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WORLDEPHOTOS .







NIKOLA TESLA, AT 78, REVEALS NEW "DEATH BEAM." Tesla, father of radio and of modern methods of generation and distribution of electrical energy, who was 78 yesterday (July 10, 1934), announced a new invention, or inventions, which he considered the most important of the 700 made by him. He has perfected a method and apparatus which will send concentrated beams of particles through free air of such tremendous energy they will bring down a fleet of 10,000 enemy planes at a distance of 250 miles from a defending nation's border and will cause armies of millions to drop in their tracks.

NEW YORK... NIKOLA TESLA, FATHER OF RADIO AND OF MODERN METHODS OF GENERATION AND DISTRIBUTION OF ELECTRICAL ENERGY, WHO WAS 78 YESTERDAY, ANNOUNCED A NEW INVENTION, OR INVENTIONS, WHICH HE CONSIDERED THE MOST IMPORTANT OF THE TOO MADE BY HIM. HE HAS PERFECTED A METHOD AND APPARATUS WHICH WILL SEND CONCENTRATED BEAMS OF PARTICLESTHRU FREE AIR OF SUCH TREMENDOUS ENERGY THEY WILL BRING DOWN A FLEET OF 10,000 ENEMY PLANES AT A DISTANCE OF 250 MILES FROM A DEFENDING NATION'S BORDER AND WILL CAUSE ARMIES OF MILLIONS TO DROP IN THEIR PHOTO SHOW S ::::::NIKOLA TESLA, INVENTOR.

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TESLA, AT 78, REVEALS NEW "DEATH BEAM".

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Photo show s::::::Nikola Tesla, inventor.



TIME & L FE BUILD NO COCCEPELLES CENTES MEW TORK 20

June 23, 1952

Dear Mr. Anderson:

We have checked our files thoroughly and find that the picture Time used of Dr. Nikola Tesla in the July 20, 1931 issue has been lost.

In the July 23, 1934 issue of Time we ran a full length picture of Dr. Tesla which we secured from Wide World, 50 Rockefeller Plaza, N. Y. C.

I am sorry we can't be of more assistance to you.

Sincerely yours,

R. W. Boyd, Jy.

Mr. Leland I. Anderson 127 Seymour Ave. S. E. Minneapolis 14, Minne

ARCHBISHOP DEFIED THE SUN TO PROVE IT DIDN'T LIE.

Lengthy articles excoriated the Sun for its refusal to apologize publicly. Here and there appeared little bold-face paragraphs like these:

Insulted by the Sun
Xaverlan Brothers. Tell Your Students That
Saint Francis Xavier, Dearest Friend of Saint
Isnatius, and The Saint Whose Name Your
Order Bears, Has Been Insulted By the Mornica Sun

ing Sun.

Insulted by the Sun

Mothers and Fathers Who Have Daughters in the Religious Sisterhoods Your Daughters have Been Insulted by the Morning Sun.

A picture of Rev. Dr. Fulton J. Sheen, printed because he had just been appointed Papal Chamberlain, was captioned: "... Has been insulted by the Sun which says the Catholic Church has canonized 'an ordinary scoundrel' and a 'consummate blackmand'."

Last week's issue of the Catholic Readvice on the quickest and most effective means of cancelling one's subscription to

Fish Story

Every Saturday the arch-Republican New York Herald Tribine devotes a sec-tion to pet fish. One week it is guppyis the next. Siamese fighters the next, Black

the next. Stamese fighters the next. Black Mollies. Last week the headline read SALT FOUND EFFECTIVE REMEDY FOR MANY ILLS OF TROPICAL FISH Beneath appeared a picture of "A pearl danio, showing the hump-backed appearance sometimes developed by old speciment."

Readers interested in the ailing old denio plunged hopefully into the story that followed. They read:

"The greatest danger in the United states at the present time is the 'cabal of under-cover Socialists' known as the brain trust." Representative Hamilton Fish Jr.. Republican, of the 26th Congressional District, New York, said last right

The story a dozen paragraphs long said noting about pearl danio nothing about salt remedies. Not until the next edition did Herald Tribute editors catch an error coused by "slugging" the Republican remarks of the vociferous New York Congres-man under his own name

SCIENCE

Tesla's Ray

He has produced nothing tangible for a long time, but he still remains one of the foremost living inventors of electrical ap-paratus. His day comes once a year. On his birthday Manhattan newshawks seek him out in some hotel, listen closely to his words. Wearing an outmoded brown suit, he received the Press one day last

week in a Hotel New Yorker reception room. That day Nikola Tesla was 78.

The first thing Nikola Tesla invented was a hook for catching frogs. That was not long after he learned to talk, in the Croatian hamlet of Smiljan where he was born. He studied physics and matheborn. He studied physics and mathematics at two universities, got into telegraph engineering, went to Budapest, to Paris, to the U. S. in 1884 to work for Thomas Edison. Soon he had a research laboratory of his own. Four years later he patented the induction motor, first effective utilization of alternating current. He discovered the rotary magnetic field principle used today in the hydroelectric plants at Niagara Falls. He invented dy-namos, transformers, induction coils, con-

namos, transformers, induction coils, condensers, are and incandescent lamps. He was acclaimed a great genius.

All that was long ago and Tesla has lingered on into a twilight of semi-obscurity. His hotel room is now his only laboratory, his brain his only tool. When callers importune him he takes a bath or goes to bed. When he takes about his work his deep-set blue eyes burn with an art fire. He walks prodicing distances work his deep-set blue eyes burn with an ice fire. He walks prodigious distances through the city streets. His most valued friends are the New York Public Library's component pigeons. A hie-long bachelor. Dr. Tesla is tall, spare erect, parchment-skinned, beak-nosec. The mustache he

skinned, beak-nosed. The mustache he once wore is gone.

Even at the peak of his renown he had great visions. In 1900 he was ready to care tuberculosis with oscillating electricity. In 1909 he promised motors capable of driving ocean liners at 50 knots. In 1911 it was storm-proof dingibles without propellers. In the last decade his annual utterances have been mostly re-

hashes of previous interviews, with something new every three or four years. In 1924 he was planning to transmit power by radio. In 1927 he was scheming to transmer bower by radio. In 1927 he was scheming to harness sea power. In 1931 he would make all fuels superfluous by tapping cosmic energy. Last week Dr. Tesla an-



Wide World

NIKOLA TESLA

World opinion does not affect him.

nounced a combination of four inventions which would make war unthinkable.

which would make war unthinkable.

Nutrices of the idea is a death rav—a concentrated beam of sub micros epic particles flying at velocities approaching that of light. The beam according to Tesla would drop an army in its tracks, bring down squadrons of airplanes 250 miles iway. Inventor Tesla would discharge the ray by means of: 1) a device to nuility the impeding effect of the atmosphere on the particles: 2) a method for setting up a high potential: 5) a process for implifying that potential to 50,000.000 volts; 4) creation of "a tremendous electrical repelling force." Two of these are complete in Dr. Tesla's mind. The other two await minor details

mendous electrical repelling force. Two of these are complete in Dr. Tesla's mind. The other two await minor details. Dr. Tesla pointed out that the weapon is purely one of defense since his beam must be renerated in great immovable power plants. With generators set up on all the world's national boundaries no country would ever acain be able to attack another. Further details said Dr. Tesla, would be unfolded before the Geneva Disarramment conference.

The death ray always exciting to laymen is an old familiar to scientists. After the interple setary "space sho," it is probably the most popular gadget in pseudoscientific faction. Even in Herbert George Wells's shrewilly written Illar of the Worlds (1898), the first act of arriving Martlins is to spray spectators with a death keem. In real life death rays have been announced time & again but never convincingly demonstrated. When one Hurry Grinnell-Matthews loudly an nounced a death ray some years ago in

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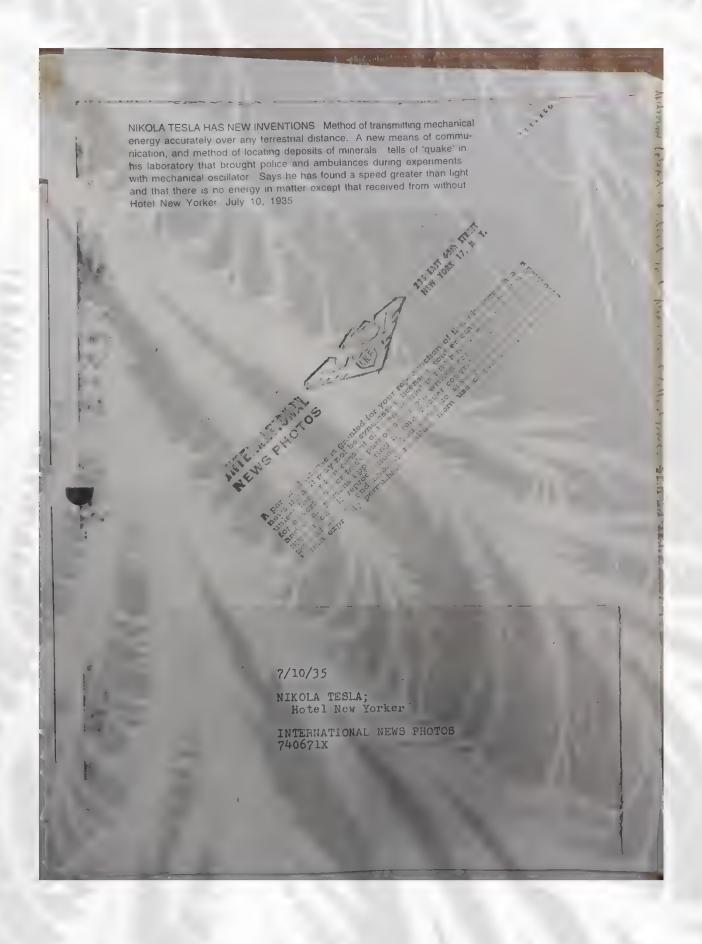
NOTED INVENTOR TO CELEBRATE BIRTHDAY
New York, Nikola Tesla, father of radio and of
modern power transmission who will celebrate his
birthday on July 10th, as he appeared today in
his suite at the Hotel New Yorker. 7/8/35

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NEW YORK, JULY 10, 1935 -- NIKOLA TESLA, YUGO-SLAVIAN SCIENTIST AND INVENTOR, IS SHOWN IN THESE CANDID CAMERA STUDIES TODAY AS HE CE-LEBRATED HIS 79TH BIRTHDAY ANNIVERSARY BY CLAIMING THREE STARTLING DEVELOPMENTS IN THE SCIENCES. ONE IS A METHOD AND APPARATUS FOR TRANSMITTING MECHANICAL ENERGY, ANOTHER WAS THE MEANS OF PASSING AN INDUCTION CURRENT WITH A VARYING FLUX ONE WAY ONLY THROUGH A CIRCUIT WITHOUT USING A COMMUTATOR, AND THE THIRD CLAIM WAS PROOF THAT MANY OF THE PROPOSITIONS OF RELATIVITY ARE FALSE.

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Anniversary.

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Jumo 18th, 1908.

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Thank you very mich for your letter of June 4th. I have often ored with pleasure our discussions in New York, and hope to see you again lear future. If you ever have time to some to California, be sure to visit here.

Boliove me, with kind regards,
Yours very sincerely,

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June 4, 1908.

Dr. George Ellery Hale, Director of the Solar Observatory of the Carnegie Institution, Mount Wilson, California.

My dear Dr. Hale:--

I learn with pleasure of your forthcoming book, The Study of Stellar Evolution, from which I expect to derive much needed information. I have greatly regretted that since our meeting at Chicago years ago, we have never been able to get Your work interests me very much, and I am again together. heartily in sympathy with you.

Please do not fail, the next time you come to New York, to call on me and give me an opportunity to exchange a few ideas with you.

Sincerely yours,

N. Tesla

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